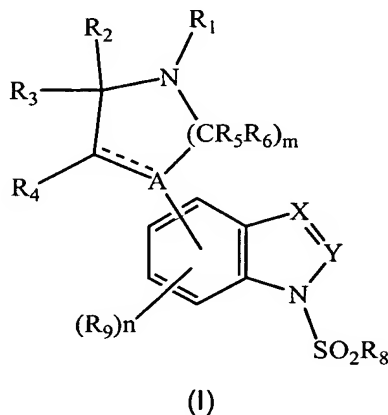


IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A compound of formula I



wherein

A is C, CR₄₀ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, ~~C₄-C₆alkenyl~~, C₂-C₆alkenyl, ~~C₄-C₆alkynyl~~, C₂-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or C₁-C₆alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of [4,] 2 [~~or 3~~];

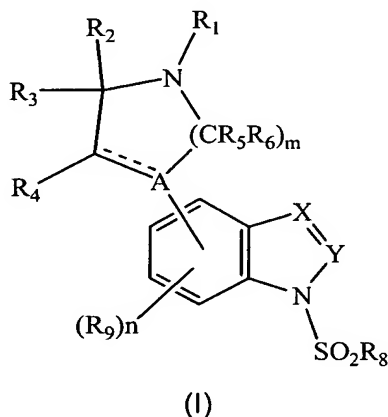
n is 0 or an integer of 1, 2 or 3; and

--- represents a single bond or a double bond; or a pharmaceutically acceptable salt thereof.

2. (Cancelled)
3. (Original) The compound according to claim 1 wherein X is CR₁₁ and Y is N.
4. (Original) The compound according to claim 1 wherein X is CR₁₁ and Y is CR₇.
5. (Original) The compound according to claim 1 wherein R₈ is an optionally substituted phenyl group.
6. (Original) The compound according to claim 1 wherein R₂, R₃, R₄, R₅ and R₆ are H.
7. (Currently Amended) The compound according to claim [2] 1 wherein R₁ is H or a C₁-C₆alkyl or cycloheteroalkyl group each optionally substituted.
8. (Original) The compound according to claim 1 selected from the group consisting of:
 - 1-(phenylsulfonyl)-4-piperazin-1-yl-1H-indole;
 - 1-[(2-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - 1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - 1-[(3,4-dimethoxyphenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - 1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - 1-[(4-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - 1-[(5-bromothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - 1-[(4,5-dichlorothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;
 - methyl 4-[(4-piperazin-1-yl-1H-indol-1-yl)sulfonyl]phenyl ether;
 - 4-piperazin-1-yl-1-[[4-(trifluoromethoxy)phenyl]sulfonyl]-1H-indole;
 - 4-(4-benzylpiperazin-1-yl)-1-(phenylsulfonyl)-1H-indole;
 - 4-(4-benzylpiperazin-1-yl)-1-[(2-bromophenyl)sulfonyl]-1H-indole;
 - 4-(4-benzylpiperazin-1-yl)-1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1H-indole;
 - 4-(4-benzylpiperazin-1-yl)-1-[(3,4-dimethoxyphenyl)sulfonyl]-1H-indole;
 - 4-[4-(3-methoxybenzyl)piperazin-1-yl]-1-(phenylsulfonyl)-1H-indole;
 - 1-(phenylsulfonyl)-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
 - 1-(phenylsulfonyl)-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
 - 1-[(2-bromophenyl)sulfonyl]-4-[4-(3-methoxybenzyl)piperazin-1-yl]-1H-indole;
 - 1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
 - 1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;

1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;
 1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;
 1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
 1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
 1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
 1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;
 1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;
 1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;
 1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;
 1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and
 the pharmaceutically acceptable salts thereof.

9. (Withdrawn) A method for the treatment of a disorder of the central nervous system related to or affected by the 5-HT₆ receptor in a patient in need thereof which comprises administering to said patient a therapeutically effective amount of a compound of formula I.



wherein

A is C, CR₁₀ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, C₁-C₆alkenyl, C₁-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R_7 and R_{11} are each independently H, halogen or an C_1 - C_6 alkyl, aryl, heteroaryl or C_1 - C_6 alkoxy group each optionally substituted;
 R_8 is an C_1 - C_6 alkyl, aryl or heteroaryl group each optionally substituted;
 R_9 is H, halogen or an C_1 - C_6 alkyl, C_1 - C_6 alkoxy, C_1 - C_6 alkenyl, aryl or heteroaryl group each optionally substituted;
 R_{10} is H, OH or an optionally substituted C_1 - C_6 alkoxy group;
 m is an integer of 1, 2 or 3;
 n is 0 or an integer of 1, 2 or 3; and
--- represents a single bond or a double bond; or
a pharmaceutically acceptable salt thereof.

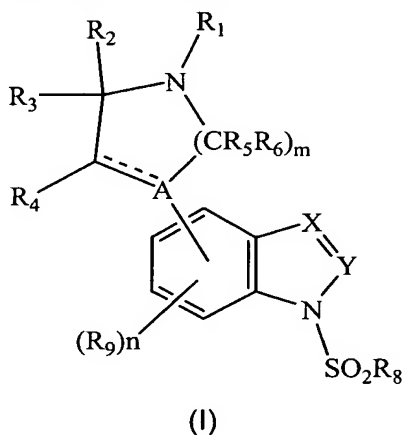
10. (Withdrawn) The method according to claim 9 wherein said disorder is a motor disorder, anxiety disorder or cognitive disorder.

11. (Withdrawn) The method according to claim 9 wherein said disorder is schizophrenia or depression.

12. (Withdrawn) The method according to claim 10 wherein said cognitive disorder is a neurodegenerative disorder.

13. (Withdrawn) The method according to claim 12 wherein said neurodegenerative disorder is Alzheimer's disease or Parkinson's disease.

14. (Currently Amended) A pharmaceutical composition which comprises a pharmaceutically acceptable carrier and an effective amount of a compound of formula I.



wherein

A is ~~C~~, ~~CR₁₀~~ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is H, C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, ~~C₄-C₆alkenyl~~ C₂-C₆alkenyl, ~~C₄-C₆alkynyl~~ C₂-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or C₁-C₆alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of ~~[1,]~~ 2 ~~[or 3]~~;

n is 0 or an integer of 1, 2 or 3; and

--- represents a single bond or a double bond; or

a pharmaceutically acceptable salt thereof.

15. (Cancelled)

16. (Original) The composition according to claim 14 wherein R₈ is an optionally substituted phenyl group.

17. (Original) The composition according to claim 14 wherein X is CR₁₁ and Y is N.

18. (Original) The composition according to claim 14 wherein X is CR₁₁ and Y is CR₇.

19. (Original) The composition according to claim 14 having a compound of formula I selected from the group consisting of:

1-(phenylsulfonyl)-4-piperazin-1-yl-1H-indole;

1-[(2-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(3,4-dimethoxyphenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(5-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

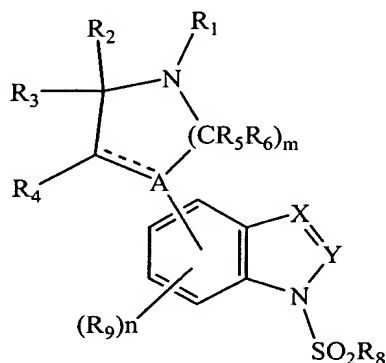
1-[(4-bromophenyl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(5-bromothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

1-[(4,5-dichlorothien-2-yl)sulfonyl]-4-piperazin-1-yl-1H-indole;

methyl 4-[(4-piperazin-1-yl-1H-indol-1-yl)sulfonyl]phenyl ether;
 4-piperazin-1-yl-1-[[4-(trifluoromethoxy)phenyl]sulfonyl]-1H-indole;
 4-(4-benzylpiperazin-1-yl)-1-(phenylsulfonyl)-1H-indole;
 4-(4-benzylpiperazin-1-yl)-1-[(2-bromophenyl)sulfonyl]-1H-indole;
 4-(4-benzylpiperazin-1-yl)-1-[(6-chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1H-indole;
 4-(4-benzylpiperazin-1-yl)-1-[(3,4-dimethoxyphenyl)sulfonyl]-1H-indole;
 4-[4-(3-methoxybenzyl)piperazin-1-yl]-1-(phenylsulfonyl)-1H-indole;
 1-(phenylsulfonyl)-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
 1-(phenylsulfonyl)-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
 1-[(2-bromophenyl)sulfonyl]-4-[4-(3-methoxybenzyl)piperazin-1-yl]-1H-indole;
 1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-4-ylmethyl)piperazin-1-yl]-1H-indole;
 1-[(2-bromophenyl)sulfonyl]-4-[4-(pyridin-3-ylmethyl)piperazin-1-yl]-1H-indole;
 1-(phenylsulfonyl)-5-piperazin-1-yl-1H-indazole;
 1-(phenylsulfonyl)-6-piperazin-1-yl-1H-indazole;
 1-[(2-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 1-[(4-bromophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
 1-[(4-bromophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 1-[(5-bromothien-2-yl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
 1-[(5-bromothien-2-yl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 1-[(4-fluorophenyl)sulfonyl]-5-piperazin-1-yl-1H-indazole;
 1-[(4-fluorophenyl)sulfonyl]-6-piperazin-1-yl-1H-indazole;
 methyl 4-[(5-piperazin-1-yl-1H-indazol-1-yl)sulfonyl]phenyl ether;
 1-phenylsulfonyl-4-(4-propylpiperazin-1-yl)-1H-indazole;
 1-phenylsulfonyl-4-piperazin-1-yl-1H-indazole;
 1-phenylsulfonyl-4-(4-phenethylpiperazin-1-yl)-1H-indazole;
 1-phenylsulfonyl-4-[4-(3-phenylpropyl)-piperazin-1-yl]-1H-indazole; and
 the pharmaceutically acceptable salts thereof.

20. (Currently Amended) A method for the preparation of a compound of formula I.



(I)

wherein

A is ~~C~~, ~~CR₄₀~~ or N;

X is CR₁₁ or N;

Y is CR₇ or N with the proviso that when X is N, then Y must be CR₇;

R₁ is C₁-C₆alkylcarbonyl, C₁-C₆alkylcarbonyloxy or an C₁-C₆alkyl, ~~C₄-C₆alkenyl~~ C₂-C₆alkenyl, ~~C₄-C₆alkynyl~~ C₂-C₆alkynyl or cycloheteroalkyl group each optionally substituted;

R₂, R₃, R₄, R₅ and R₆ are each independently H, halogen, OH or an optionally substituted C₁-C₆alkyl group;

R₇ and R₁₁ are each independently H, halogen or an C₁-C₆alkyl, aryl, heteroaryl or alkoxy group each optionally substituted;

R₈ is an C₁-C₆alkyl, aryl or heteroaryl group each optionally substituted;

R₉ is H, halogen or an C₁-C₆alkyl, C₁-C₆alkoxy, C₁-C₆alkenyl, aryl or heteroaryl group each optionally substituted;

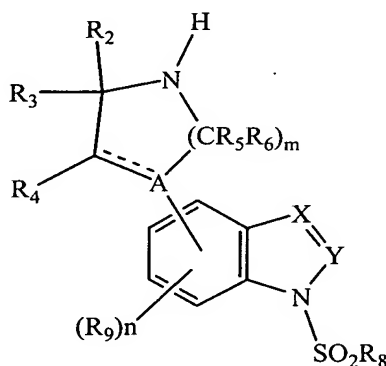
R₁₀ is H, OH or an optionally substituted C₁-C₆alkoxy group;

m is an integer of ~~[1,]~~ 2 ~~[or 3]~~;

n is 0 or an integer of 1, 2 or 3; and

--- represents a single bond or a double bond

said method which comprises reacting a compound of formula Ia



(Ia)

wherein A, X, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, m and n are as defined hereinabove for formula I with a compound R₁-Hal wherein R₁ is as defined hereinabove for formula I and Hal is Cl, Br or I.